

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

117
35246

U.S. D. T. OF AGRICULTURE
LIBRARY
MAY 11 1962
CURRENT SERIAL RECORDS

BOBWHITE

PROPAGATION AND MANAGEMENT



Fred H. Dale, Staff Specialist

Upland Wildlife Management and Ecology, Branch of Wildlife Research

The bobwhite is the most popular farm game bird of southern and eastern United States. Wherever it occurs, from Texas to southern New England and from Iowa to the tip of Florida, persons will be found who are interested in knowing how to increase bobwhites on the land. In addition, there are those who for one reason or another want to propagate quail in pens. The novice may be bewildered by the very bulk of published material dealing with bobwhite management and propagation. Thus, the purpose of this leaflet is to point out some of the problems involved in these activities, and to suggest a few sources for detailed information.

The increased interest in shooting preserves has provided an added incentive to the rearing of quail in pens. The shooting preserves set high standards for quail, requiring birds that are free flying and wild in their reaction to man and dogs, yet they provide a good market for birds of this quality.

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE
Washington • Wildlife Leaflet 426 • October 1960

Supersedes Wildlife Leaflet 335 of June 1951.

In contrast, however, there has been a decline in demand for hand-reared quail to release for restocking wild coverts. Experience has convincingly demonstrated that the way to game abundance is through habitat improvement rather than release of pen-reared birds in the wild.

The number of quail on a farm depends upon many things. Location, climate, kind of soil, and pattern of food and cover all combine to determine the "carrying capacity" of the land. When all conditions are right, quail are plentiful. When they are not favorable, no amount of stocking with pen-reared or wild-trapped birds will result in good quail populations.

In a few places, such as on southeastern hunting estates, quail management is a major program, and thousands of dollars may be spent to increase the quail-producing capacity of the land. Extensive areas are burned over annually to prevent excessive growths of thick weeds and brush, safe nesting places are provided, and special crops are seeded to provide abundant food.

Such activities are likely to be expensive for the average farmer, unless they contribute to the normal farming program. Fortunately, there are many things that farmers can do to favor bobwhites and at the same time promote farm production or make farming easier. Some sound agricultural practices, that are followed without intent to increase wildlife, benefit both game and songbirds. When the farmer in the northern part of the bobwhite's range protects drainage-ditch spoilbanks from grazing, he is interested primarily in cutting down on erosion and maintenance costs. Yet bobwhites may profit just as much from this additional cover as from a patch created especially for them.

Since conditions differ greatly in the various parts of the country, quail management suggestions must be general if they are to apply over the entire range. In many parts of the Southeast, the principal problem is to restrict growth of rank weeds and brush that crowd out more useful plants and make too dense cover. In prairie States, the situation is almost completely reversed, and the need usually is to encourage growth of cover. Regardless of location, quail need the right combination of cover and open areas to provide safe nesting, feeding, and roosting places.

Some farming practices of the past few years have been unfavorable to quail. Intensive farming of large blocks with the use of machinery, the abandonment of poor lands and their subsequent reversion to solid stands of woods and brush, timber stand improvement resulting in pure stands of pine, and the heavy pasturing of large acreages, all have operated to reduce the mixed cover pattern necessary for high quail populations.

Other changes in farming, made in the interest of soil and water conservation and sound land management, have been beneficial to quail. These include shrub borders along woodlands, hedges, contour farming, and living fences. Not all these are practicable in all parts of the bobwhite's range. Multiflora rose, which is popular as a living fence in parts of the Midwest, has more limited use in the Southeast, where its dense cover is not always desirable. Contour farming is of little consequence in flat lands of the midwestern prairies; and in some States scarcity of woodlands limits use of woodlot borders.

The bicolor lespedeza strip, used as a woods border, a hedge, or food strip, is recommended in many parts of the bobwhite's southern range. For the farmer, bicolor may help to control erosion, retard the spread of trees into the field or serve as a low-growing windbreak, while for bobwhites it provides about the right density of cover and an excellent food supply. Where bobwhite management is an important consideration to the landowner, odd corners and unproductive areas are often planted with bicolor solely as a quail management measure.

Bicolor lespedeza is adapted to most of the Southeast, from northern Florida to about the latitude of southern Maryland, and new strains are being developed to extend its range northward and westward. Common varieties now grow as far north as Michigan, but in most northern States the growing season is too short for consistent seed production.

Contour farming designed to reduce erosion also increases the amount of edge between pasture, woodlot, and cropland, and for this reason is beneficial to bobwhites. Curving field boundaries characteristic of contour farming make fencing difficult. This has led to the use of living fences and hedges between fields, often to the advantage of wildlife. Bobwhites, like most wildlife, fare better on productive lands than on poor, sterile ones; so soil conserving measures of any kind are likely to be helpful to the extent that they increase and maintain fertility of the land.

Though the above practices are chiefly part of land management or good farming rather than game management, it is difficult to make a clear-cut distinction between the two. Where operations beneficial to both agriculture and wildlife go beyond the point favorable to maximum profit and crop production, then they become game management.

The best advice for one interested in managing bobwhites in the wild or rearing them in pens is to seek help from local sources. The State game department often is in a position to provide assistance. In some States landowners can obtain materials for habitat improvement from the game department and in almost all States they have technical staffs to offer sound guidance on local problems.

The Sportsmen's Service Bureau, 250 East 43rd Street, New York 17, New York, has made special studies of shooting preserves and has some helpful advice for potential managers. Their bulletin entitled "Shooting Preserve Management," which is intended only for those managing or contemplating managing a preserve, sells for fifty cents. The Wildlife Management Institute, 709 Wire Building, Washington, D. C., has some bulletins on propagation and on game management, which are distributed free of charge.

Two game breeding publications, Modern Game Breeding, 28 West State Street, Doylestown, Pennsylvania, and Game Bird Breeders, Pheasant Fanciers and Aviculturists' Gazette, 1328 Allen Park Drive, Salt Lake City 5, Utah, give valuable coverage to problems of production and marketing of game birds, including bobwhites.

Anyone interested in rearing bobwhites should consult State authorities to learn whether there are legal restrictions on holding game birds in captivity. In some States it is necessary to obtain a breeder's license before rearing any game birds. State game men can also advise on sources of eggs and chicks and on special problems of propagation under local conditions.

REFERENCES

- Quail and Pheasant Propagation (1949), 72 pp., Dennis Hart and T.R. Mitchell. Wildlife Management Institute, 709 Wire Building Washington 5, D. C. (free).
- The Bobwhite Quail, Its Habits, Preservation and Increase (1936), 559 pp., Herbert L. Stoddard, Charles Scribner's Sons, New York. (\$10.00).
- Shooting Preserve Management 3rd Edition (1960), Charley Dickey. Sportsmen's Service Bureau, 250 East 43rd Street, New York 17, New York (50 cents).
- Whirring Wings. The Bobwhite Quail in Missouri (1952). 96 pp., Jack A. Stanford. Missouri Conservation Commission, Farm Bureau Building, Jefferson City, Missouri. (Free distribution within Missouri. Handling charge outside State, 25 cents).
- Quail Management Handbook for East Texas (1954) 45 pp. Daniel W. Lay, Bulletin Number 34, Texas Game and Fish Commission, Austin, Texas. (Free distribution in State only).
- The Bobwhite in Massachusetts (1957) 20 pp., Thomas H. Ripley, Bulletin Number 15, Massachusetts Division of Fisheries and Game, Bureau of Wildlife Research and Management, 73 Freemont Street, Boston 8, Mass. (free).